(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International publication date 19 May 2005 (19.05.2005)

PCT

(10) International publication number

WO 2005/045344 A1

(51) International patent classification⁷: F28F 27/02

F28D 9/00,

Stuttgart (DE); WEGNER, Jürgen [DE/DE]; Auf der

(21) International application number:

PCT/EP2004/012719

(22) International filing date:

10 November 2004 (10.11.2004)

(25) Language of filing:

German

(26) Language of publication:

German

(30) Data relating to the priority:

103 52 881.4 10 November 2003 (10.11.2003)

- (71) Applicant (for all designated States except US): BEHR GMBH & CO. KG [DE/DE]; Mauserstrasse 3, 707469 Stuttgart (DE)
- (72) Inventors; and
- (75) Inventors/Applicants (US only): HENDRIX, Daniel [DE/DE]; Remstalstrasee 31, 70374 Stuttagrt (DE); MOLDOVAN, Florian [DE/DE]; kornbergstrasse 28a, 70176

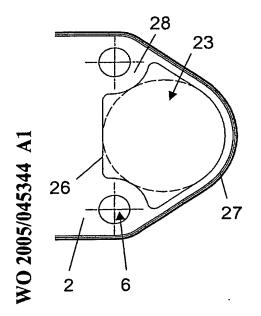
Ebene 17, 73054 Eislingen/Fils (DE).

- (74) Joint Representative: BEHR GMBH & CO. KG; Intellectual Property, G-IP, Mauserstrasse 3, 70469 Stuttgart (DE).
- (81) Designated states (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated states (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian Patent (AM, AZ, BY, KG,

[continued on next page]

As printed

- (54) Title: HEAT EXCHANGER, ESPECIALLY CHARGE-AIR/COOLANT RADIATOR
- (54) Bezeichnung: WÄRMEÜBERTRAGER, INSBESONDERE LADELUFT-/KÜHLMITTEL-KÜHLER



- (57) Abstract: Disclosed is a heat exchanger, particularly a charge-air/coolant radiator (1), having a disk-type structure. Said heat exchanger comprises a plurality of disks (2) which are penetrated by a coolant and a fluid that is to be cooled. The inlet zone and/or outlet zone for the fluid that is to be cooled is/are expanded at least at the discharge end or delivery end.
- (57) Zusammenfassung: Wärmeübertrager, insbesondere Ladeluft-/Kühlmittel-Kühler (1), in Scheibenbauweise mit einer Mehrzahl von einem Kühlmittel und einem zu kühlen den Fluid durchströmten Scheiben (2), wobei der Ein- und/oder Ausström-Bereich des zu kühlenden Fluids zumindest abbzw. zuströmseitig erweitert ist.

KZ, MD, RU, TJ, TM), European Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for the following designation US

Published:

With International Search Report.

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.